

# Critical Analysis of Hugh Ross' Progressive Day-Age Creationism Through the Framework of Young-Earth Creationism

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## Abstract

Since the early 1800s, the evangelical community has sought to harmonize the scientific interpretations of long periods of time and the early chapters of Genesis to determine the appropriate age of the universe. There are primarily two groups—those who believe the universe is billions of years old and those who believe the universe is thousands of years old. One view within the former group is called Progressive Day-Age Creationism. This view is taught by Hugh Ross and is quite popular within the evangelical community. This article analyzes primarily the writings of Ross and the implications that his view may have towards understanding the early chapters of Genesis, the trustworthiness of the Bible, and the Gospel.

**Keywords:** progressive day-age creationism, six-day creationism, day, hermeneutics, Genesis

## Introduction

When it comes to the topic of origins, the evangelical community agrees that God is the creator of the universe. Where this agreement usually ends, however, is on the question how and when did God create. Did God begin the creation process billions of years ago or thousands of years ago? Did He create ex nihilo (out of nothing), through the evolutionary process of natural selection, or some combination thereof? Whereas some evangelicals are convinced of an older earth (billions of years old) and debate the means by which God created, others maintain that the earth is younger (thousands of years old) and affirm a literal meaning of Genesis 1.

Ernst Mayr, an evolutionary biologist, opined that Christianity's biblical account of creation as told in the book of Genesis, chapters 1 and 2 "was virtually unanimously accepted not only by laypeople but also by scientists and philosophers. This changed overnight, so to speak, in 1859 with the publication of Charles Darwin's *On the Origin of Species*" (Mayr 2001, 12). However, prior to Darwin, James Hutton published *Theory of the Earth* in 1795 and Charles Lyell published the volumes *Principles of Geology* in the 1830s. They sought to dethrone the catastrophism of Noah's Flood and replace it with uniformitarianism, the belief that the present is the key to the past. Darwin's book popularized their theories, arguing that the God of the Bible was not necessary to explain the origin of the universe. And the creation event in Genesis 1, which would indicate the universe is thousands of years old, was not the correct interpretation. The interpretation of Genesis 1 that creation is a recent event can trace its roots to the church fathers (Mook 2012, 29–32), and was the prevailing view of Hebrew scholars

before the 1860s (Sexton 2018, 5). This view was challenged by Hutton, Lyell, and Darwin to suggest western society should discard the Genesis story and replace it with their scientific view that sought to remove the necessity of a creator. Consequently, the evangelical community, primarily because of Darwin's popularization of the philosophical theory of evolution, has sought to harmonize the scientific interpretations of long periods of time with the early chapters of Genesis to determine the appropriate age of the universe.

Because of the influence of Darwin's book, two groups have emerged from this topic of reconciling Genesis with the prevailing scientific hypotheses and interpretations. One group are old-earth proponents, who believe the universe and earth are billions of years old, and the other group are young-earth proponents, who believe the universe and earth are thousands of years old. There are a few proposals within the old-earth group. Proposal #1 is the Gap Theory, which believes the universe was created as recorded Genesis 1:1, then there was a long period of time (a gap) of billions of years. Subsequently, in Genesis 1:2, God recreated the billion-year-old earth in six 24-hour periods of time. Proposal #2 is Theistic Evolution, which affirms that the earth is billions of years old but asserts that God used the mechanism that Darwin discovered, natural selection, to evolve the flora, fauna, and human beings that are present on the earth. Proposal #3 is The Framework Hypothesis, which seeks to reclassify Genesis 1 as poetic literature rather than historical narrative literature, thus allowing the possibility of billions of years (or whatever the prevailing scientific view of the day) to be inserted into Genesis 1 without doing hermeneutical harm. Proposal #4 is Progressive

Day-Age Creationism, which believes that the earth is billions of years old and that each creation day represents many millions of years of time, but God didn't use the Darwinian process to evolve the flora, fauna, and human beings.

The effect of proposal #4, Progressive Day-Age Creationism (PDAC), chiefly reinforced by Hugh Ross, is prominent within the evangelical community. For example, Douglas Groothuis, professor of philosophy at Denver Seminary, references Ross' book *Creation and Time* in his footnotes before opining "there is overwhelming evidence that the universe is 13–15 billion years old and that the earth is ancient as well" (2011, 274). Norman Geisler, who taught at Dallas Theological Seminary, Trinity Evangelical Divinity School, and founded Southern Evangelical Seminary and Veritas Evangelical Seminary is quite open to Progressive Day-Age Creationism. He writes, "Not only is it possible that there are time gaps in Genesis 1, but there is also evidence that the 'days' of Genesis are not 6 successive 24-hour days" (Geisler 2014). Immediately after writing his theological assertions, he refers his readers to *Creation and Time* by Ross. Geisler adds, "It seems plausible the universe is billions of years old...there is no demonstrated conflict between Genesis 1–2 and scientific fact...a literal interpretation of Genesis is consistent with a universe that is billions of years old" (Geisler 2003, 650). Wayne Grudem, who taught at Trinity Evangelical Seminary, and is currently teaching at Phoenix Seminary and the author of *Systematic Theology*, has affirmed that Progressive Day-Age Creationism is a valid "option for Christians who believe the Bible today" (Grudem 2000, 297–300).<sup>1</sup> J.P. Moreland from Biola University, who is open to the possibility of Progressive Day-Age Creationism, but not committed,<sup>2</sup> remarks "My own views about the creation-evolution controversy are divided between old and young earth creationism. While I lean heavily toward old earth views, I do not see the issue as cut-and-dried" (Moreland and Reynolds 1999, 142). Add that when Ross published *Creation and Time*, his book received the endorsements from Walter Kaiser from Gordon-Conwell Seminary, Earl Radmacher from Western Seminary, Stan Oakes and Ted Martin from Campus Crusade, and Jim

Berney with Intervarsity. Buttressed that PDAC is prominent within the evangelical community is that none of the larger denominational seminaries, such as, the Southern Baptist, Methodist, and Reformed, or the non-denominational seminaries, such as Dallas Theological, Denver, or Trinity Evangelical, affirm a young-earth position, which is an indication that old-earth theology is permitted.<sup>3</sup>

Thus, given the influence of old-earth views in general, and the PDAC in particular within the evangelical community, the purpose of this paper is to (1) analyze Proposal #4, PDAC, and (2) the implications that the PDAC view may impart to Christians seeking to understand the early chapters of Genesis.<sup>4</sup> In addition to analyzing PDAC, the young-earth view of Genesis—the Six Day Creation Theory (SDC)—will be presented to allow the reader to contrast (or compare) each view. This will be accomplished by (1) describing the central tenets of each view, (2) describing a critical analysis of each view, and (3) summarizing the theological and practical implications for each view. What this paper will not address in great detail is the Gap Theory, Theistic Evolution, Framework Hypothesis, and the genealogical debate of Genesis 5 and 11. The goal after reading this article will be that the reader will be able to compare and contrast PDAC and SDC view, recognize the hermeneutical dangers that the PDAC view presents when interpreting the Bible, and properly crown the Bible to a magisterial role and science to a ministerial role when interpreting the creation account.

### Central Tenets of the Progressive Day-Age Creationism

The most vocal proponent of PDAC is Hugh Ross and those connected with the ministry Reasons To Believe (RTB).<sup>5</sup> Ross earned his Doctor of Philosophy in Astronomy from the University of Toronto and founded RTB in 1986.<sup>6</sup> He has written dozens of books and articles on this topic and most recently, in 2017, was one of four contributors to the book *Four Views on Creation, Evolution, and Intelligent Design*. He has made many appearances on media outlets and written numerous news articles. He best represents PDAC, which affirms that "evidence of a

1. Grudem rejects proposals 1 and 2 but accepts proposal #3 as well as young-earth proposals.

2. Moreland has been less committed to a particular view of old earth creationism but is certainly against proposal #1.

3. I am a graduate of Dallas Theological Seminary (ThM) and Southeastern Baptist Theological Seminary (Edd). I am grateful for my education from each institution and consider both to be stellar examples of a high view of the Bible.

Although I wish both seminaries would affirm a recent creation, my point is to demonstrate that old-earth teaching is quite common within the evangelical community and I would like to suggest influenced partly by the writings of Hugh Ross.

4. See <https://answersingenesis.org/genesis/gap-theory/>, <https://answersingenesis.org/theistic-evolution/>, and <https://answersingenesis.org/creationism/old-earth/whats-wrong-with-the-framework-hypothesis/> for a brief critique of proposals #1, #2, and #3.

5. [www.reasons.org](http://www.reasons.org).

6. "Who We Are." Reasons to Believe.com. accessed June 4, 2018. <http://www.reasons.org/about/hugh-ross>.

cosmic beginning in the finite past—only 13.8 billion years ago” agrees with Genesis 1 (Ross 2014, 15). This means the days of creation in Genesis 1 must be long definite periods of time (Ross 1994, 36).

### PDAC: Two Sources of Revelation

The foundational premise of PDAC is its view of two sources of revelation. Ross affirms that PDAC is biblically justified by two inerrant sources. Those two sources are nature and the Bible.

Some readers might fear<sup>7</sup> that I am implying that God's revelation through nature is somehow on an equal footing with His revelation through the words of the Bible. Let me simply state that truth, by definition, is information that is perfectly free from contradiction and error. Just as it is absurd to speak of some entity as more perfect than another, so also one revelation of God's truth cannot be held as inferior or superior to another. (Ross 1994, 57)

Ross likens nature as the sixty-seventh book of the Bible (1994, 56). He appeals to Psalms 19:1–4 which states

The heavens are telling of the glory of God; And their expanse is declaring the work of His hands. Day to day pours forth speech, And night to night reveals knowledge. There is no speech, nor are there words; Their voice is not heard. Their line has gone out through all the earth, And their utterances to the end of the world. In them He has placed a tent for the sun.

He adds that Job 12:7 declares that air, birds, and fish teach about God's creation, and Psalm 85:11 affirms that truth springs from creation. Ross adds “that in addition to the words of the Bible being ‘God-breathed’” as stated in 2 Timothy 3:16 that “so also are the words of God spoken through the work of his hands. In other words, the Bible teaches a dual, reliably consistent revelation” (Ross 1994, 56). This would seem to mean that nature can accurately communicate the mind of God from the past, present, and future scientific observations. Rana and Ross add that even though creation is a transcendent miracle (God acting outside of matter, energy, space, and time), “the creation event is a testable idea that can fall within the domain of science” (Rana and Ross 2004, 36 and 208). Thus, PDACs can know what God intended to communicate during creation event by reading the Bible<sup>8</sup> and by “reading” nature. PDACs “anticipate God's ‘two books’ will prove consistent internally, externally, and mutually. One provides more detail on the redemptive story, the other more detail on the creation story, but they speak in perfect harmony. Neither negates or undermines the other” (Ross 2017, 71).

### PDAC: Definition of *Yôm* (Day)

Ross believes that *yôm* (the Hebrew word for *day*) does not mean a 24-hour day in Genesis 1. He writes that *yôm* has a range of meanings. One, the period of light as contrasted with the period of darkness. Two, a general non-descriptive time. Third, a point in time. Four, a year in the plural. Five, a 24-hour period of time, which he believes is not found in Genesis 1 (Ross 2006, 25). He cites from William Wilson in his book *Old Testament Word Studies*, who argues that *yôm* is frequently interpreted as a long period of time (Ross 1994, 46; 2006, 25). Ross adds that even when the cardinal (one, two, three, etc.) or ordinal (first, second, three, etc.) numbers are attached to *yôm* such as in Genesis 1:3 (first day), 1:8 (second day), 1:13 (third day), etc. that there is “no grammatical rule [that] requires that a numbered *yôm*, especially in reference to divine activity, be a twenty-four-hour period of time” (Ross 2017, 81). He provides the example of Hosea 6:2 which states “He will revive us after two days; He will raise us up on the third day, That we may live before Him” where Bible commentators “have noted that the ‘days’ in this passage (where the ordinal is used) refer to a year, years, thousands of years, or maybe more” (Ross 1994, 47). Ross also adds “If Moses wanted to communicate a creation story consisting of six eons, he would have no other option but to use the word *yôm* to describe those eras” (Ross 2014, 35).

Ross also rejects the idea that the Hebrew words *ereb* translated *evening* and *boqer* translated *morning* when added to *yôm* must be interpreted as an indication that a 24-hour cycle had elapsed. *Ereb* can mean “sunset” and “end of the day” and *boqer* can mean “sunrise” and “beginning of the day”, thus “Genesis 1 may well refer to the ending of one time period and the beginning of another, regardless of the length of that period” (Ross 2017, 82). For example, Ross opines that the phrase “in my grandfather's day’ refers to my grandfather's lifetime, thus the morning and evening of his day would be his youth and old age” (Ross 1994, 46). For Ross, the addition of cardinal and ordinal adjectives and the nouns *ereb* and *boqer* have limited bearing upon understanding the definition of *yôm*. Thus, Ross' position can be summarized as, when *yôm* is connected to *ereb* and *boqer* and a cardinal or ordinal adjective that *yôm* does not need to be understood as a 24-hour period of time, particularly in Genesis 1.

### PDAC: Understanding of the Seventh Day

Another argument that Ross makes to defend billions of years in Genesis 1—2 is the belief that the

<sup>7</sup> Ross used the word *fear* which would seem to imply he knew his view might be controversial.

<sup>8</sup> Ross also asserts that passages in Job, Deuteronomy, Psalms, Colossians, and Hebrews describe the creation event, not exclusively Genesis 1–2. See Ross 2017, 19.

seventh day of the creation event has not ended. He argues that for Days 1 through 6 the verses end with the phrase “there was evening and morning”, while for Day 7 the verse ends by stating that God “rested on the seventh day from all His work which He had done.” According to Ross, the seventh day has not ended. And he adds that Psalm 95 and Hebrews 4 affirm that God’s seventh day of rest is ongoing which should bring clarity that the seventh day has not ended. “The seventh day of the creation week carries on through centuries, from Adam and Eve, through Israel’s development as a nation, through the time of Christ’s earthly ministry, through the early days of the church, and on into future years” (Ross 1994, 49). He concludes from these passages that a minimum of several thousands of years have passed, most likely billions of years have elapsed. “Given the strong parallel structure of the passage, if the seventh day represents a lengthy time period, it seems reasonable that the other days could be lengthy periods as well” (Ross 1994, 49; 2006, 27; 2017, 80). Ross eliminates any ambivalence by declaring “an integrative analysis of all these passages leads to the conclusion that *yôm* refers to a long, but finite, time period. This understanding of ‘day’ yields a consistent reading of all the Bible’s creation texts” (Ross 2014, 89).

#### **PDAC: Creation Death Before Adam’s Sin**

Ross believes that death and decay have always been part of God’s creation. He rejects the interpretation that Romans 5:12 affirms that death entered the world because of Adam’s disobedience. Ross replies, “Paul [Romans 5:12] clarifies that Adam’s sin inaugurated death among humans. Neither here nor anywhere else in Scripture does God’s word say that Adam’s offense brought death to all *life* (emphasis Ross)” (Ross 2017, 86). Furthermore, death has been from the beginning of time. Plants died when the first animals ingested them, and animals have experienced death for millions of years. “Romans 5:12 addresses neither physical death or soulish death. It addresses spiritual death... [Adam] died spiritually [when] he broke his harmonious fellowship with God and introduced the inclination to place one’s own way above God’s” (Ross 1994, 61). Death has always existed since God created the heavens and the earth since “[he] nurtured the seeds of Earth’s first life, perhaps re-creating these seeds each time they were destroyed” (Rana and Ross 2004, 43). During the early events of the earth, although it was hostile, God ensured that life would persist, albeit at times by divine intervention (a miracle). Ross bases this belief upon the second law of thermodynamics which states that heat will flow from hot bodies to cold bodies.

A consequence of this direction of heat flow is that, as time proceeds, the universe becomes progressively more mixed or disordered. This increasing disorder, with time, is the principle of decay, also termed ‘entropy’. (Ross 1994, 66)

The law of decay makes possible photosynthesis and all the food photosynthesis provides. It allows us to digest our food. It allowed Adam and Eve, before and after the fall, to perform work. The law of decay brings many more good things, but it also produces inevitable pain, suffering, and death. (Ross 2014, 92)

The bondage that creation has endured that Paul addresses in Romans 8:20–22 is not the result of Adam’s sin. This is the natural order that God created, for “without decay, work (at least the universe God designed) would be impossible. Without work, physical life would be impossible, for work is essential to breathing, circulating blood, contracting muscles, digesting food—virtually all life-sustaining processes” (Ross 1994, 65–66). The death that Paul speaks of is the spiritual and physical death that humans experience because of Adam’s sin: “Paul clarifies that Adam’s sin inaugurated death among humans” (Ross 2017, 86). Since life began, at least, on the third day of creation and Adam was working on the sixth day, therefore, Adam’s sin could not have inaugurated decay of, at least, plants, which is a form of death. Hence, the “process of [death] has been in effect since the universe was created” (Ross 1994, 67).

#### **Summary of the PDAC View**

The PDAC view insists that there are sound reasons and reliable evidence that the universe is billions of years old. First, there are two inerrant sources of revelation—the Bible and nature. Both are reliable and will not contradict each other. Second, the Hebrew word *yôm* (translated as *day*) can mean a definite, long period of time and the nouns *ereb* (translated as *sunset*) and *boqer* (translated as *sunrise*) have a limited bearing upon understanding the definition of *yôm*. *Day* in Genesis 1 does not mean a 24-hour period of time. Third, the seventh day in Genesis does not end with the same “evening and morning phrase” as Day 1 through Day 6 do, thus there is the possibility that the unending aspect of Day 7 could apply to Days 1 through 6. Fourth, the second law of thermodynamics requires the decay and death of plants (Adam and Eve ate plant-based food), which would mean Romans 5:12 only addresses the spiritual death of humans. These reasons (and more) lead Hugh Ross to conclude that he is warranted to claim that the universe is certainly not thousands of years old, but billions of years old.

#### **Central Tenants of the Six-Day Creation Theory**

Young-earth creationists reject the conclusions of any old-earth theory that seeks to set the upper

limits of the age of the universe and earth much beyond 10,000 years old.<sup>9</sup> They would also reject any interpretation of Genesis that would allow for a Darwinian-type evolutionary model that allows for billions of years of a decay and death cycle prior to Genesis 1. Young-earth creationists embrace the Six-Day Creation Theory (SDC) as the only view which can accurately describe the Genesis creation account. The theory asserts that God created the universe and the earth throughout the duration of six 24-hour periods of time. And based upon other textual markers in Genesis, the universe is thousands of years old. SDC has been influenced by numerous individuals, most recently by Ken Ham, the founder of Answers in Genesis; Henry Morris III from the Institute for Creation Research; and Carl Wieland from Creation Ministries International. All three ministries were influenced by John Whitcomb and Henry Morris, who are considered the fathers of the modern creation movement (Mortenson and Ury 2008, 8). The SDC affirms that the traditional understanding of the Genesis creation account is that “the Bible is very clear that the days of the creation week in Genesis 1:1–2:3 are literal, twenty-four-hour days, just like our days today” (Catchpoole and Harwood 2014, 235–260; Ham 2017, 20; Jordan 1999, 22; McGee 2012, 1; Morris 1976, 54; Whitcomb and Morris 1961, iv).

### SDC: One Primary Source of Revelation

The SDC affirms that there are two sources of revelation—nature and the Bible—but the Bible is the primary source of God’s revelation and should be deferred to principally. Nature is a secondary source, because nature is not composed of propositional statements that can be evaluated as either true or false. Unlike Ross, they would argue that it is simply inaccurate to classify nature as the sixty-seventh book of the Bible. “God’s creation speaks to us non-verbally” while “Scripture speaks to us verbally and truthfully about so much more...creation is cursed, whereas Scripture (the written Word) is not” (Ham 2017, 19). Of the two sources, only the Bible can reveal propositional revelation, while nature “must be formulated from the observations by *interpreting* them in a framework or *paradigm* (emphasis in original)” (Sarfati 2004, 41). Nature does not blurt out “this is what I am saying, or this is what I mean after observing me.” Rather, scientists bring their presuppositions with them that often influence their interpretations. Thus, an old-earth and a young-earth scientist will often interpret the scientific discoveries of nature differently, based upon their assumptions. Thus, there must be arbitrator who can

determine which view point is correct. Only the Bible as a revelation from God can fulfill that role.

These presuppositions, likewise, can influence the interpretations of the Bible (or any text). The difference is that the Bible (or any text) can be interpreted correctly based upon the laws of logic (which originate from God). For example, the law of noncontradiction which affirms that A cannot be A and non-A at the same time and in the same relationship. That is, people assume that communication is occurring through writing, if what the author is expressing is not the opposite of what he intended to communicate. Authors of the Bible (divine and human) crafted their thoughts through the means of writing, in such a way that they could be understood. (Just like I am writing at this moment and you—the reader—can follow my thought process.) Nature, on the other hand, is not expressing itself through writing, thus the observer of nature must interpret through his presuppositions. This means nature is mediated through the observer’s interpretative grid, while Scripture is mediated through the written language, which claims to be without error (in the original writings) rather than the observer’s interpretative grid. There are more steps to interpret nature than there are steps to interpret Scripture, thus a greater likelihood of an incorrect interpretation. Added to this debate is that the Bible is not corrupted (and the same applies to the ancient copies to the degree that they align with the original), while nature is corrupted by the effects of the curse described in Genesis 3. SDCs start with the supremacy of the revelation of the Bible, while PDACs start with the supremacy of the revelation of the Bible and nature. The SDC starts with an inerrant source, the Scriptures, while the PDAC starts with nature, which has been corrupted, and the Scriptures, which they interpret based upon their observations of corrupted nature.

Moreover, for SDCs, built into this framework of the supremacy of the Bible is the recognition that humanity cannot know everything, particularly the origins of the universe. Hence “if we start with the someone who knows everything, who does not lie, and who has revealed to us what we need to know” (Ham 2013, 50) then we have the ability to know what happened at the beginning of time when humanity was not present. The SDC view places a higher confidence upon accurately interpreting the meaning of the Bible than accurately interpreting the meaning of the scientific discoveries of nature. Given the human mind is corrupted and in need of divine assistance, the SDC view does not view nature as the sixty-seventh book of the Bible.

<sup>9</sup> See <https://answersingenesis.org/bible-characters/adam-and-eve/creation-date-of-adam-from-young-earth-creationism-perspective/> for the debate on the age of the earth among young-earth creationists.

### SDC: Definition of *Yôm*

According to SDCs *yôm* can have five meanings: (1) the period of light (as contrasted with the period of darkness); (2) the period of twenty-four hours; (3) a general vague “time;” (4) a point of time; and (5) a year (Chaffey and Lisle 2008, 25; Coppes 1999, 370; Koehler et al 1994–2000, 399). To accurately discern the correct meaning of *yôm* requires an understanding of the context. And in this case, the context is Genesis 1.

SDCs assert: (1) *yôm* always refers to a normal literal day when it is used as a singular noun; (2) in Genesis 1:1–2:3 *yôm* is used 13 times in the singular and once in the plural;<sup>10</sup> (3) when *yôm* is used with *ereb* “evening or sunset” and *boqer* “morning or sunrise” it means a literal day; (4) *ereb* and *boqer* are used together with *yôm* six times within Genesis 1:1–2:3 and 19 times outside of Genesis 1:1–2:3; (5) when *ereb* and *boqer* are used without *yôm* (38 times), the meaning of *yôm* is still a literal day; and (6) when *yôm* is qualified with a cardinal and ordinal number, the meaning is a literal day (McCabe 2008, 225–228). All these points are designed to state that the author of Genesis intended to communicate in clear terms that each day of Genesis 1:1–2:3 was a literal day.<sup>11</sup>

SDCs emphasize that Moses, the presumed author-complier of the first book of the Bible, was trying to communicate a particular understanding of *yôm* in Genesis 1:1–2:3. He used temporal markers such as “first,” “second,” etc., with *yôm* and bounded contextually *yôm* to the words “evening” and “morning.” Moses used those words to communicate that each creation day was literal day. SDCs conclude that assigning a meaning to *yôm* other than a literal 24-hour period of time is impossible contextually. Had Moses intended to communicate that God created the earth in six 24-hour periods of time, what words or phrases would he choose to use? SDCs unabashedly answer that the exact choice of words are located in Genesis 1:1–2:4.

### SDC: Understanding of the Seventh Day

According to SDCs, the seventh day of creation has ended, thus it has not continued for the last 6,000+ years as PDACs proport (Geisler 2003, 643). SDCs provide four arguments for their defense. One, “the text [of Hebrews 4:3–5] does not say that the seventh day of the creation week is continuing to the present day. It merely reveals that God entered His rest on the seventh day” (Chaffey and Lisle 2008, 51). The author of Hebrews is not stating in this section that somehow God’s sabbath rest has continued until the present, rather he links “God’s Sabbath-rest at the

time of Creation with the rest that the Israelites missed in the desert” (Hodges 1985, 788). There is a future rest that the original audience could miss, but that rest is not a continuation of the seventh day rest. Two, they affirmed that the seventh day must be a literal day “because Adam and Eve lived through it before God drove them out of the Garden. Surely, he would not have cursed the earth during the seventh day which he blessed and sanctified” (Whitcomb 1973, 68). Three, the rest in Hebrews 4 is a literal rest in the literal kingdom of Jesus’ reign on earth for the millennial period in the land of Canaan. Griffith argues that since Joshua was able to offer that same rest, but it was not realized due to Israel’s rebellion, then the rest that awaits the Hebrew readers must be similar. “Certainly [Joshua] could not have offered them [Israelites] salvation (spiritual peace) or eternal life (heaven)...what he did offer was access to the land [Canaan]” (Griffith 1990, 298). The key point from this view is that a literal interpretation is the best option to understand the word “rest,” not a spiritual, indefinite understanding. Four, if Hebrews 4:3–5 is affirming as PDACs state that the seventh day must be a long period of time because the phrase “evening and morning” are not included, then if the exclusion of the phrase “allows the seventh day to be longer then this is really an unintentional admission that the first six days were literal 24-hour days” (Chaffey and Lisle 2008, 52). In other words, by the interpretative method of PDAC, if the omission of the phrase “evening and morning” for the seventh day of the Creation Week is evidence to suggest that the seventh day can be indefinite, then the inclusion of that phrase “evening and morning,” which is bounded to the Days 1–6 of the Creation Week should be evidence to suggest that those days are definite. Davidson (2015, 78) remarks “the references to ‘evening’ and ‘morning’ together, outside of Genesis 1, invariably, without exception in the Old Testament (fifty-seven times total—nineteen times with *yôm*, or ‘day’, and thirty-eight without *yôm*) indicate a literal solar day.” So, at best, according to the PDACs, if their interpretation is correct (and contextually this view cannot be correct), Day 7 could be indefinite, while Days 1–6 are literal 24-hour days. This would undermine their purpose of transferring the “indefiniteness” of Day 7 to Days 1–6.

### SDC: Death after Adam’s Sin

Prior to the end of the sixth day of creation God had declared multiple times that what He had created was good, but at the end of the sixth day of

<sup>10</sup> The word *days* at the end of Genesis 1:14 clearly is not commenting on the possible length of time associated with the six days of creation.

<sup>11</sup> A literal day for SDC is an approximate 24-hour day.

creation God declared that all that he had created was *very* good. The Hebrew word **טב** translated *very* carries with it the idea of “greatly, utterly, i.e., pertaining to a high point on a scale of extent” (Swanson 1997). God’s creation pinnacle was the end of the sixth day. Those who espouse the SDC theory believe the Scriptures clearly communicate that prior to the sin of Adam and Eve, there was no death or disease. It would seem odd for God to declare His creation on Days 1–5 good and then to highlight Day 6 as very good while death, bloodshed, and disease had been occurring for millions of years.

Genesis 3 asserts that the ground was not cursed until Adam and Eve sinned. Verses 17 and 18 affirm that creation was not subject to death, bloodshed, or disease: “Cursed is the ground because of you; in toil you will eat of it all the days of your life. Both thorns and thistles it shall grow for you.” Paul’s commentary in Romans (8:20) about the Fall supports the teaching that the curse came after sin and the only place in Scripture that designates what could be described as an historical global-scale curse is Genesis 3.<sup>12</sup> Death, bloodshed, and disease were not part of the original creation event.

### Critical Analysis of the PDAC Theory

Each theory has arrived at a divergent view as to the age of the universe, interpreting the Bible, and interpreting historical science.<sup>13</sup> The two theories of the origin of the universe are not compatible. Either the PDAC theory is correct and the universe is billions<sup>14</sup> of years old or the SDC theory is correct and the universe is thousands of years old. To state another way, either the PDAC theory is wrong or the SDC theory is wrong. There is no way to combine both views to create a third view. To assert the universe is thousands of years old or to assert that the universe is billions of years old are two disparate views.

Yet some readers may challenge the two options that I presented as a false dichotomy by insisting that there are other options that could explain the how to combine the origin of the universe with the Genesis creation account. Three of those options have been already mentioned in the opening paragraphs of this article. The scope of this article prohibits a full-scale critique of the other options. However, the other options, at the core, share a similar conclusion. Proposal #1 is the Gap Theory,

which believes the universe and earth were created as recorded in Genesis 1:1, then there was a long period of time (a gap) of billions of years, and then in Genesis 1:2 God recreated the billion-year-old earth in six 24-hour periods of time. Proposal #2 is Theistic Evolution which assumes that the earth is billions of years old, but that God used the mechanism that Darwin discovered, natural selection, to evolve the flora, fauna, and human beings that are present on the earth. Proposal #3 is The Framework Hypothesis, which seeks to reclassify Genesis 1 as poetic literature rather than historical narrative literature, thus allowing the possibility of billions of years (or whatever the prevailing scientific view of the day) to be inserted into Genesis 1 without doing hermeneutical harm.

Each one of these proposals has something in common—they seek a way to reconcile what they already believe to be settled—that the universe is billions of years old. My point was not to suggest that there are the only two options to reconcile the age of the universe with scientific discoveries of nature and the creation account in Genesis, but to demonstrate that Proposals #1, #2, and #3 all end with the same time frame—a universe that is billions of years old. To reject PDAC or anyone of the old-earth proposals shifts the options to SDC, the view that the universe is thousands of years old.

Hence, I would suggest that the PDAC view, though not identical to proposals #1, #2, and #3, is a similar enough variation of the core view shared by all that the universe is billions of years old. The SDC view is in stark contrast to the PDAC view and the other proposals. It maintains the universe is thousands of years old. To put it bluntly, there are only two main views: The view the universe is billions of years old or the universe is thousands of years old. These are not compatible views.

The PDAC and SDC views, at their core, have different philosophical assumptions that affect their interpretation of the observations of nature and of the Bible. The PDAC theory emphasizes that knowledge primarily proceeds from the observations of natural revelation via scientific discoveries, which in turn will enlighten the interpretation of the Scriptures. In other words, Scripture is subject to the collective human observations of science for its interpretation, unless what occurs is a miracle (which applies to the

<sup>12</sup> Cain is cursed in Genesis 4, but his curse is individual not global.

<sup>13</sup> Ross would state that as an astronomer, the study of the cosmos would be observational and historical science simultaneously. But this is a false statement. The astronomer is studying light in the present, even though the light may have left its respective star in the past; the astronomer does not observe the past. Instead, he sees the light in the present after it has traveled through space and was likely affected by gravity, cosmic dust, and other influences along the way.

<sup>14</sup> This author is not aware of any current origin view within the evangelical community that purports that the universe is millions of years old. And even if such a view did arise, it would be incompatible with PDAC which claims to follow current scientific discoveries of billions of years and would be incompatible with SDC which argues that the early chapters of Genesis, if interpreted by the historical-grammatical method, at most, dates a universe at an upper limit of 10,000 years old.

virgin birth, resurrection of Jesus, etc., but not the creation account), then Scripture speaks accurately, and the reader can interpret the text properly. On the other side, the SDC theory believes before observing natural revelation via scientific discoveries, that the Bible is accurate in what it says and thus enlightens scientific interpretation of the observations. They presuppose that the Bible is the final authority, unlike the PDAC view that espouses the equality of the Scriptures and human observations of nature. For the SDC view, when scientific observations contradict the plain meaning of the Bible (the creation account, virgin birth, or resurrection of Jesus), then they will side with the Bible. This does not mean that SDCs ignore the observations of nature; on the contrary, the scientific discoveries of nature complement the interpretations of the Bible, especially when the Bible does not explicitly speak on an issue (i.e., what happened to the dinosaurs after Noah's Flood?)

### **PDAC: Distant Star Light and the Age of the Universe**

Ross' philosophical assumption that dictates how he interprets Genesis 1–11, specifically, and any passage in the Bible he deems is related to Genesis 1–11, generally, is that natural revelation supersedes special revelation because the creation event is testable. (Rana and Ross 2004, 36). He contends that there is “evidence of a cosmic beginning in the finite past—only 13.8 billion years ago” (Ross 2014, 15). One primary reason Ross believes the age of the universe is approximately 13.8 billion years old is because of the distant starlight problem<sup>15</sup> (Ross 1994, 92–95; 2014, 161–164). The distant starlight problem is one of the most difficult rebuttals for the SDCs to answer, and one that seems to give the strongest evidence that the universe is billions of years old. This would seem to subsequently indicate that PDAC is the more accurate view.

Distant starlight, as a concept, seems to negate the SDC view. The stars are far away, and their light is too far away to reach earth in 6,000 to 10,000 years as SDC view claims. Therefore, the universe must be older than thousands of years, and the SDC view cannot be correct. Described in more detail, the distance from the farthest observed stars to earth is billions of light years. A light year is not a unit of time, but the distance that light can travel in one year, which is 5.88 trillion miles (Faulkner 2013, 279). The distance from the farthest stars is calculable, and the rate of the speed of light is constant at approximately 186,000 miles per second. To determine how long it would take, in years, for light to travel from the

farthest stars is to take the distance from those stars to earth and divide the distance by one light year. For example, Alpha Centauri, the next nearest star system to our Solar System, is approximately 4.3 light years away from earth (25 trillion miles/5.88 trillion miles) (Vardiman and Humphreys 2011b). According to PDACs, light from the most distant stars (galaxy MACSO647-JD) requires 13.3 billion light-years to reach earth. If the PDAC view is correct, then the most distant observed stars are billions of years old, because it took light that long to travel, hence the universe is billions of years old. To state another way, SDCs place an upper limit of the age of the universe at approximately 10,000 years, but if that is correct, then how can we see the light from these stars that are billions of light years away? This creates a problem for SDCs. How can light arrive to planet earth in such a short time?

### **SDC: Distant Starlight and the Age of the Universe**

First, SDCs do affirm that the distance from the farthest galaxies is accurate (Lisle 2012, 30). Second, they have proposed several views that can answer the distant star light problem.<sup>16</sup> Third, the SDC view has continued to critique itself by explaining the advantages and disadvantages of each solution. Of the various solutions proposed by SDC, two of the more popular views espoused are Humphreys' White Hole Cosmology view and Lisle's Anisotropic Synchrony Convention view.

In 1994, Humphreys proposed a view that during the Creation Week, the earth was inside a large gravity well called a white hole. A term more familiar to the public is a black hole. A black hole is region in space that has a gravitational force that is “so strong that light rays cannot escape” instead the light rays “bend back on themselves” (Humphreys 1994, 23). A black hole is a place where “time is massively distorted” (1994, 23). Humphreys suggests that at the creation event earth was in a white hole—“a black hole running in reverse”—where “matter and light rays would have to move out of the white hole, but they could not go back in” (1994, 24). The analogy Humphreys uses is that a black hole is like a fat man gorging himself, always increasing in size, while a white hole is like a fat man on a strict diet with no input, only output. A black hole at the creation event would never allow light to leave and eventually the universe would collapse, but there is evidence that the universe is expanding (1994, 23–24). Thus, Humphreys hypothesizes that at the creation event an effect of general relativity that in a white hole both

<sup>15</sup> Ross also reasons from the radiometric decay rates, but due to the length of this article only the distant starlight problem will be addressed. See (DeYoung 2005) to provide an SDC solution to answering the radiometric decay rates problem.

<sup>16</sup> See (Faulkner 2013) for a summary of the potential solutions to the distant starlight problem by young-earth creationists.

mass and light stream outward which can provide an explanation for the expanse of the universe (1994, 26). Faulkner summarizes the proposal of Humphreys by declaring

relativistic time dilation near the event horizon of the white hole [would allow] for great periods of time to pass elsewhere in much of the universe while only days elapsed on and near the earth. The much greater time elsewhere would allow light from the most distance portions of the universe to reach the earth in just days. (2013, 279)

To put it another way, at the creation event, the clocks on the earth were ticking a different rate compared to the clocks of the distance cosmos. This was because earth was near the gravitational well which would have affected the frame of reference of time. Hence, if one could have been an outside observer looking at the entire creation event and observed the clocks on earth and the clocks on distance cosmos, then one would have seen the clock's hands on the distance cosmos fly like fans, while the clock's hands on planet earth would have been almost imperceptibly slow. Thus,

as the fourth day proceeds on earth, the more distant stars age billions of years, while their light also has the same billions of years to travel to earth. While the light is on its way, space continues to expand, relativistically stretching out the light waves and shifting the wavelengths towards the red side<sup>17</sup> of the spectrum (Humphreys 1994, 37–38).

Ultimately, light reaches earth on Day Four as described by Genesis within a 24-hour period of time, while from the perspective of the distant cosmos, light took billions of years to traverse space to earth. If Humphreys' view is correct, then the distant starlight problem is not a problem. Light can arrive instantaneously on Day Four according to earth's frame of reference for time (a real 24 hours), while light can travel over billions of years from the most distant parts of the universe to earth from their frame of reference.

In 2008, Humphreys modified his white hole cosmology view with a new time dilation model which he calls achronicity, or "timelessness" (Humphreys 2008, 84). He did this because he did not believe his previous view provided a solution to allow enough time dilation for nearby stars and galaxies and his metric was too complex to analyze fully (Vardiman and Humphreys 2010). The thesis of the modified view is that in the beginning of the creation event "the deep" of Genesis 1:2 would have created a dent in space such that conditions near the dent would have caused time and all physical processes to stop.

Humphreys suggests that "the deep" would have had a mass "in the order of twenty times that of all galaxies within the viewing range of the Hubble space telescope [and] would have been in the shape of a ball a few light years diameter" (2010).

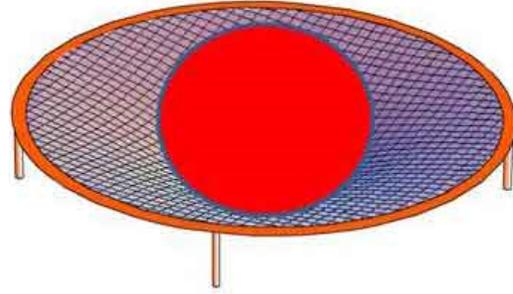


Fig. 1. Red ball represents "the deep" and the trampoline represents space at the beginning of Creation. Adapted from Vardiman and Humphreys (2010).

Humphreys opines that during the second day of creation that God separates "the deep" with a material in Hebrew called *raqia*. At the center of "the deep" is a marked body of spherical water called earth. The remaining waters were separated by a substance called *raqia* translated "the firmament" or "the expanse." The *raqia* spreads out spherically, thus at the end edge of the universe there are ice particles surrounding the universe. Think of a helium balloon with a marble fixed at the center (or near center). The rubber material and marble represent "the deep" and earth and the helium represents the *raqia*. In other words, during the second day of creation, God created and expanded the universe with the material *raqia* (similar to the material we call space) and places earth (a watery spherical mass at this time) at the center or near the center of the universe. As an illustration, he imagines space representing a trampoline and the universe representing a heavy metal ring (the edge is the ice particles of "the waters above" including the *raqia*) creating a spherical indentation and laying at the center (or near center) of the metal ring is a pebble representing earth.

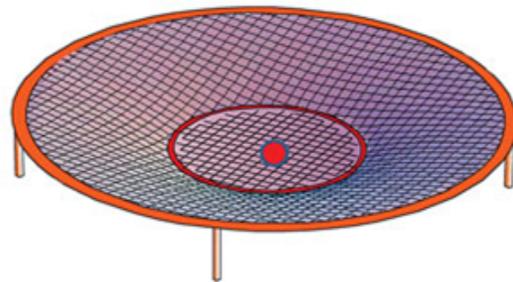


Fig. 2. The space, universe, *raqia*, and earth illustration. Adapted from Vardiman and Humphreys (2011a).

<sup>17</sup> For galaxies, red shift and distance are correlated (the Hubble law). Hence, the greater a galaxy's redshift, the greater its distance. Humphreys is attempting to explain how there is red shift in galaxies with only 6,000–10,000 years since the creation event.

Humphreys suggests that the mass of “the deep,” now spread out with the *raqia* and having an edge (represented by the metal ring) affects time. He declares “the distribution of mass controls the fabric of space, the fabric of space controls the speed of light, and the speed of light controls time. Time is speeded up or slowed down throughout space according to the distribution of mass” (Vardiman and Humphreys 2011a). According to Humphreys, on Day 4, as God was stretching the *raqia*, the gravitational pull was extremely strong because of the mass of “the deep.” This gravitational pull, in effect, stopped time, thus while God was creating the stars and galaxies, which were inside the ring, the light was arriving instantaneously to earth. Time was standing still. As God stretched the fabric of space, light trajectory was also stretching and this would account for the red-shifting of the light waves (2011a).

Humphreys also purports a second time dilation event during the Genesis Flood because of which if Noah could have seen the night sky (too many clouds from the monumental flood rains) “he would have seen the galaxies grow older by about 500 million years” (Vardiman and Humphreys 2011b). Thus, Humphreys suggests there were two gravitational time dilations that could have occurred—at Creation and at the Flood—that can explain how light traveled from the distant stars to earth. This, he believes, can provide a reasonable response to the distant starlight problem that Ross purports is insurmountable.

In 2001, Lisle proposed a view, under a pseudo name Robert Newton, (Newton 2001) that there two conventions of time—observed time and calculated time. Observed time is when we see an event and calculated time “is calculated by subtracting the light travel time (distance to the event divided by the speed of light) from the observed time” (2001, 80). He purports that Genesis 1 describes the creation of the sun, moon, and stars on Day 4 from observed time. Lisle is quick to point out that calculated time would seem to imply that God created the sun, moon, and stars billions of years before the light would reach earth on Day 4. This implication would contradict a literal interpretation of Genesis 1. Lisle’s solution is to remind the readers that based upon Einstein’s theory of Special Relativity “the motion of the observer affects the measurement of time” (81). This means at calculated time, light travels at a constant speed of approximately 186,000 miles per second, but at observed time, light travels at various speeds dependent upon the location of the observer. And there “does not appear to be any way to empirically test the unidirectional speed of light” (85). So, which “time” is correct? Lisle argues that both are correct.<sup>18</sup>

Both are useful conventions of time. An analogy would be the English and metric system of measurement. Both are conventions of measurement and neither can be tested to be “correct” (Lisle 2010, 206).

Lisle adds that the Bible uses observed time because calculated time could not have been known by Moses. Moses did not know the speed of light or the distances of the farthest stars. Thus, when Moses recorded the creation account, he described observed time of the stars. To state another way, if Moses were present on Day 4 he would have seen the stars instantaneously as God created them. Lisle is aware that this view might seem similar to PDAC. He remarks “the only similarity—this idea of ‘billions of years’—merely comes from the way in which we have chosen to define time, and does not reflect the duration of any actual process” (Newton 2001, 84).

In 2010, Lisle augmented his view<sup>19</sup> that the creation event can be understood from two time conventions. Convention one is the time from the perspective of Day Four on the earth during the creation event and convention two is the time from the perspective of the distant stars during the creation event (Lisle 2010, 193). Lisle also affirms that the speed of light is constant, based upon a round trip. That is, light is bounced off a mirror and returns to its source location, to measure the constant speed of light (2010, 199). But what is unique to Lisle’s augmented view is the concept that the one-way speed of light is not known. He pronounces, “however, the speed of light in any one direction is not necessarily constant. As counter-intuitive as it may seem, the one-way speed of light is not a constant of nature, but is a matter of convention” (2010, 199). This means, according to Lisle, that light could travel on Day Four from the most distant stars and arrive on earth instantaneously, as Genesis 1:14–15 seems to indicate. Lisle comments “it is already well-established that clocks tick slower as they approach the speed of light, and would stop completely if they could attain the speed of light. So, from light’s point of view (imagine that we could travel alongside the light) every trip is instantaneous anyway” (2010, 202). If Lisle’s view is correct, then the distant starlight problem disappears, because light leaves the newly created stars on Day Four at the speed of light and arrives essentially instantaneously to earth on the same day.

In summary, Humphreys’ and Lisle’s views provide a possible solution to combat the distant star light problem that PDACs present. These are not the only solutions, but a sample of the more popular science-based views. Not all SDCs believe that Humphreys’ or Lisle’s proposals are the best solutions to explain

<sup>18</sup> See (Newton 2001, 82) for a more detailed explanation.

<sup>19</sup> His first view seemed to be compatible with PDAC and needed to be revised.

the distant starlight problem, but all SDCs believe that there is a solution to explain the distant starlight problem that, when discovered, will be consistent with the Genesis creation account that places an upper limit of the universe at approximately 10,000 years old.

### **Supremacy of Special Revelation or Natural Revelation**

Ross argues that “if all of creation were completed in six twenty-four-hour days, the most sophisticated measuring techniques available, or even foreseeably available, would be totally incapable of discerning the sequence of the events. Thus, a major use of the chronology would be thwarted” (Ross 1994, 48). In other words, Ross is arguing the SDC view, if correct, could not be understood by the current (or future) model of scientific observation, therefore, the age of the universe would be unknowable, hence the SDC model should be rejected. But this is a false analogy, because the SDC view claims that one can know the approximate age of the universe based the textual clues left within Genesis 1–11.

Ross proclaims that the interpretations of nature by scientists have been proven beyond a reasonable doubt to be accurate regarding the age of the universe, thus the interpretations of Scripture by theologians must be adjusted. “God’s revelation is not limited exclusively to the Bible’s words. The facts of nature may be likened to a sixty-seventh book of the Bible” (Ross 1994, 56). This means nature is an inerrant revelation from God to be relied upon like any book of the Bible. Although I agree with the PDAC view, up to a point, that God teaches us things through nature, I cannot accept the overall conclusion that nature is equivalent to the sixty-seventh book of the Bible. My primary reason is that nature has been affected by the curse, as described in Genesis 3. Nature, as the apostle Paul describes in Romans 8:20–22, was subjected by God to a form of emptiness; it was enslaved and laments to be set free. Although this is a literary device of personification, Paul points to a real change that has happened to nature after God pronounced judgment upon Adam, Eve, the serpent, and nature. Thus, if nature has been distorted, at times the observations of nature will be distorted. Secondly, humanity’s mind has been affected by the curse as described in Genesis 3. The human mind, as the apostle Paul describes in Romans 1:18–32, suppresses the truth, is foolish, and promotes atheism, thus God gives humanity over to what they desire, which is contrary to Him and will lead to destruction. The result of God giving humanity what they want is that they worship creatures rather than Him, embrace sexual behavior that is contrary to biology, and revel in every form of wicked behavior possible.

Consequently, since nature and the human mind have been affected by the Genesis 3 curse, it would seem that the combination of a defective nature and defective human mind would, at times, produce faulty observations and faulty interpretations. Historically, believers have struggled periodically to interpret Scripture accurately; however, they have always had the standard to test their interpretations—the very words of God—Scripture. Thus, SDC proponents, recognize that they can error, at times, but they can always return to the Scriptures to test their views. The correct interpretation of the creation account is located in Genesis.

The PDAC view has a more difficult task. They will observe nature and interpret with their minds, which both have been affected by the Genesis 3 curse, to draw their conclusions. They purport in theory to give supremacy to the Scriptures (the standard), but in practice nature is equal to Scripture and, at times, seems to be superior to Scripture. Nature is not perfect like the Scriptures, thus not the standard. This would mean nature is incapable of being the sixty-seventh book of the Bible and instead ministerial to the Bible. Hence, Ross, if he were consistent, would need to submit to Scripture (the six-sixty books of the Bible) when in conflict with scientists who make interpretations of their observations of nature that are intended to undermine the Genesis creation account. This does not seem to be the theological method that Ross applies to Genesis 1–11.

To further understand Ross’ view of special and general revelation, one needs to understand his view of miracles. According to him, there are two kinds of miracles in the Bible—testable and non-testable (Ross 2014, 15). Testable miracles are the events of Genesis 1–11 while non-testable miracles are examples like the virgin birth, resurrections, and turning water into wine. He later describes miracles as transcendent, transformational, and sustaining (Ross 2017, 74). Transcendent miracles are the acts of God creating space-time, and physical laws, which are primarily described in Genesis 1:1. Transformational miracles are the acts of God working with preexisting materials to fashion life on earth and breathing life into humanity, which are primarily described in Genesis 1:2–2:3. Sustaining miracles are the acts of God to ensure life continues through harsh conditions for millions and billions of years. The difficulty with the last category of miracles, as declared by Ross, is that the Genesis account nowhere indicates harsh conditions. In fact, Genesis describes everything that God completes on each day as the opposite of harsh: it was good. It would seem that Ross has borrowed his creation account from the writings of Darwin (Darwin 1859, 60) more than from the writings of Moses.

Based upon these various labels, non-testable and transcendent miracles would seem to be identical classes; testable and transformational miracles are another class, and sustaining miracles would be in a class by itself.<sup>20</sup> Therefore, according to Ross, all the miracles in Genesis 1, minus Genesis 1:1, are testable and are within the bounds of scientific inquiry. This seems problematic because of the doctrine of *ex nihilo*, which describes God creating from nothing. Ross has concluded, based upon current scientific discoveries, with certainty, that the earth is not thousands of years old. Therefore, whatever Genesis 1–11 communicates has been or will be discovered by the scientific method.

Ross has redefined the term *miracle* with all of his categories (testable, transcendent, sustainable, etc.) to a definition that is unrecognizable. A consensus understanding of miracle is “an event in which God temporarily makes an exception to the natural order of things, to show that God is acting” (Craig 2008, 253; Purtill 1997, 62–63). Miracles are extraordinary, unlikely, and irregular (Frame 2015, 145–147). Geisler adds

it is not enough to define a miracle as an exception to the general pattern of events. This characteristic merely indicates that the event is a nonnatural one; [and] there are other possibilities within the category of nonnatural or unusual events: anomalies, magic, alien beings, demonic activity, and even providential activity. The characteristics of a true miracle are unusualness, immediateness, purposefulness, and moral goodness. (2013, 319)

The understanding of a miracle, which normally implies a supernatural event, thus beginning with a power beyond nature, has been modified to not include the creative account of Genesis 1:2–Genesis 2:4. Ross has taken the pericope of Genesis 1:2–Genesis 2:4, in which God has declared that He has created supernaturally (soil does not produce animals and the sea does not produce marine animals), and redefined the supernatural creative event to a category that seems to conveniently affirm his position of PDAC. Ross’ hermeneutic becomes the literal,<sup>21</sup> historical, grammatical, and canonical *supervised-by-scientific observations* method. The PDAC theory will only produce interpretations from Scripture that affirm that the earth is billions of years old. In the end, Ross becomes the final arbitrator of the origin debate. His interpretation of the Bible is supported by theologians<sup>22</sup> who share a similar

viewpoint that the universe is billions of years old, and his interpretations of observational science are confirmed with like-minded scientists.

### PDAC: Divergent Hermeneutics

Concluding that Ross interprets Genesis 1–11 with a different hermeneutic, his interpretations will be vastly different than the hermeneutics of SDC. Ross lists the possible literal meanings for the word *yôm* when attached to the adjectives *one*, *second*, *third*, etc., and the nouns *evening and morning*, but then finds, what he thinks, is an exception to that literal meaning in the book of Hosea. Hosea 6:2 says “He will revive us after two days; He will raise us up on the third day, that we may live before Him.” Ross comments, “for centuries Bible expositors have noted that ‘days’ referred to in this passage (where both cardinal and ordinal numbers are connected with *yôm*) represent years, perhaps as many as a thousand or more” (2017, 81). And at first glance, Ross has made an argument in favor of an interpretation of *yôm* with both a cardinal and ordinal that could be interpreted longer than a 24-hour period of time. Understanding the context of Hosea 6:2 should demonstrate that Ross has not.

Contextually, the book of Hosea focuses upon the coming judgment of the nation of Israel, the northern tribes, by the hands of the Assyrians in 722BC (Hindson and Yates 2012, 369–370). Israel was guilty of blatant disobedience of Yahweh’s law by worshipping false gods in the form of idols and displaying injustice to the poor. Yahweh commands Hosea, the prophet, to marry a harlot. The harlot will represent unfaithful Israel, while Hosea will represent Yahweh. As unfaithful as Hosea’s harlot wife is to him, so has Israel been unfaithful to Yahweh. Towards the end of Hosea 4:1–6:3, after Hosea charged that Israel was guilty of prostituting themselves with the surrounding nations by worshipping their gods instead of Him, Hosea prophesies that the nation of Israel would return to Yahweh in repentance. And after repenting, Yahweh would heal them. Within the context of Hosea 6:2–3, Yahweh promises to quickly restore them within two, no more than three days. The literal interpretation of *yôm* with the cardinal and ordinal number does not go unnoticed. Lange remarks, “two and three days are very short periods of time; and the linking of two numbers following the one upon the other, expresses the certainty of what is to take place within the period named” (2008, 61). Wolff affirms, “the ancient song in

<sup>20</sup> Sustaining miracles would seem to be closer to the theological concept of the providence of God. And if God did not sustain the earth for billions of years, then this class of miracles would be nonexistent.

<sup>21</sup> Ross affirms a literal interpretation (Ross 2006, 25; 2017, 73), but ignores the context of the passage based upon his presuppositions that the scientific community has settled the age of the universe to be billions of years.

<sup>22</sup> Theologians/philosophers like Geisler and Moreland, mentioned previously, who affirm an old-earth point of view, would certainly not place the observations of nature (general revelation) on equal footing as the Bible (special revelation). But what does concern me is that they seem to be influenced greatly by Ross, who does place observations of nature on equal footing with the Bible.

vv. 1–3 [of Hosea 6] merely voices the expectation that a sickly nation will be put on the road to recovery by Yahweh, and in the shortest possible time. The set length of time, ‘after two days, on the third’ (1974, 118). Chisholm emphasizes the future of this prophecy declaring, “these verses record the words the penitent generation of the future will declare as they seek the LORD” and the “equivalent expressions, after two days and on the third day, refer to a short period of time” (1985, 1393). All three commentaries affirm the expression as a literal time period of two or three days (or a very short period of time) not be used as textual evidence that the universe is billions of years old. The text does not allow *yôm* in Hosea 6:1–3 to be interpreted as thousands, millions, or billions of years. “The promise only makes sense when we take the days literally and take the phrases as meaning ‘quickly’” (Ham 2017, 21).

Ross is attempting to take the lack of fulfillment of Hosea 6:1–3 (Israel has yet to repent as a nation) and show that the use of *yôm* in this passage with cardinal and ordinal numbers plus the length of time since this passage (approximately 2,700 years and counting) gives him justification to pronounce that all the uses of *yôm* in Genesis 1:1–2:4 could be long periods of time extending into billions of years of time. However, for the sake of the argument, even if Ross could establish that this prophetic passage uses *yôm* in a non-literal sense (i.e. not 24-hours and I do not think there is evidence to suggest that), this passage would not overrule how the term *yôm* is understood in Genesis 1 or other passages of historical narrative where *yôm* is used with a number, particularly when that term is also used with the phrase evening and morning. In other words, *yôm* (and any word) is determined by its surrounding context. Thus, *yôm* should be defined by the context of Hosea 6:1–3. And that context seems to define *yôm* as 24-hour days or a short period of time. Applying the same rules of interpreting Scripture, *yôm* in the creation account is determined by how it is used within the context of Genesis 1:1–2:4.

### SDC: Congruent Hermeneutics

In a previous article (McGee 2012, 218), I express the following about SDC hermeneutics. Based upon the Chicago Statement on Biblical Inerrancy, SDCs affirm that the Scriptures should be

interpreted by grammatico-historical exegesis, taking account of its literary forms and devices, and that Scripture is to interpret Scripture. [They] deny the legitimacy of any treatment of the text or quest for sources lying behind it that leads to relativizing, dehistoricizing, or discounting its teaching, or rejecting its claims to authorship. (Sproul 1996, 52)

The Bible is understood based upon grammar, word order, historical context as defined by the literary context, canonical theology, and most importantly, the author’s intended meaning. E.D. Hirsch Jr. has influenced evangelical hermeneutics in the area of textual meaning and states that meaning “is represented by a text; it is what the author meant by his use of a particular sign sequence; it is what the signs represent” (Hirsch 1967, 8). Arp conveys that authorial intent is understood “by studying the text in which he (author) expressed that meaning” (2000, 36). So, what exactly is meaning? Meaning is that which has “relation to other words and to other sentences which form its context” (Osborne 1991, 76). Meaning is not found exclusively in the word, for the word carries with it a range of meaning that has been assigned based upon the cultural and literary context. Meaning is found in the text of the passage (Arp 2000, 40) as it is placed there by the author.

Within the Bible, there are two authors—human and divine—and SDCs affirm the duality of both. The meaning is discovered by understanding the author’s words in the context of the entire Bible. The affirmation of divine authorship precludes the possibility that the co-human author did not communicate the intended meaning that God desired. God, who worked through his human agent and communicated his intended meaning without violating the will of the human author, ensured that his meaning could be understood. The author of Genesis (assumed to be Moses) meant to communicate a precise meaning with his choice of words (Archer 2007, 134). This meaning cannot be found outside of the original author, but rather discovered through his intended meaning based upon the meaning assigned to the words in a selective context. Stallard and Johnson suggest that this approach is analogous to the method that Ezra used when he read the writings of Moses. Israel heard the law of God based upon the plain or normal sense of the word and then came to an understanding of that meaning (Johnson 1990, 9; Stallard 2000, 15).

SDC advocates that to interpret Genesis with their hermeneutic of literal-plain-historical-grammatical-canonical will account for the various the types of literature found in the Bible and uses appropriate principles for each respective genre. They agree with Ross that the primary witnesses from God are His creation and His word.<sup>23</sup> Where they disagree with Ross is the ranking of each witness.

Men must convert [tangible physical] evidence into words for it to be accessible and coherent, and then added to the body of knowledge. But the latter [His word] is already in words, positioned to test the conclusions men draw from the physical evidence.

<sup>23</sup> Additional witnesses would include Jesus and the Holy Spirit.

The witnesses are innately unequal in value: the Bible trumps science, not the other way around, as is customarily thought. (Boyd 2008, 173)

SDC is affirming the magisterial role of the Scriptures accompanied by the ministerial role of scientific observation (nature), not the co-regent view that PDAC purports of Scripture and nature on equal footing.

SDC also views Genesis as a book of beginnings. Within the book is the account of the beginning of the world, mankind, origin of sin, first death, genealogies from Adam to the sons of Jacob, and the establishment of the nation of Israel. The various texts were not haphazardly thrown together; the author had a clear idea of how the various written texts should fit together (Sailhamer 2009, 284). The author of Genesis mainly composed this book in the genre of narrative (Ross 1997, 57). There are certainly other genres, such as genealogy (Genesis 4 and 5), poetry (Genesis 2:23), and commentary (Genesis 2:24), but the main portion of Genesis is narrative.

Boyd focused upon Genesis 1:1–2:4 for the very purpose of ascertaining if the passage is narrative literature or poetic and he concluded it was (is) narrative literature, and not poetic literature for three reasons. One, “it is statistically indefensible to argue that this text is poetry” (2008, 176). Two, he lists ten proofs demonstrating that the authors of biblical narratives considered their narratives to be real events (176–184). Three, the words were written for 15th centuryBC hearers, therefore, the words would have meant what “the original readers would have thought them to mean” (185) and what “Israelite[s] would have understood them to mean in any other historical narrative, with the referents and events corresponding to the words” (2008, 191). Jud Davis adds (2012, 67), “top Hebrew scholars all agree that the writer of Genesis intended the word [*yôm*] to mean 24 hours.” He also quotes James Barr from Oxford.

So far as I know, there is no professor of Hebrew or Old Testament at any world-class university who does not believe that the writer(s) of Gen. 1–11 intended to convey to their readers the ideas that (a) [the] creation [event] took place in a series of six days which were the same as the days of 24 hours we now experience. (Davis, 2012, 68)

Davidson (2015, 74) augments that the literary genre of Genesis 1–11 “points to the literal and historical nature of the creation account” and asserts that the creation account is not parable genre or vision genre. Bediako (2011) adds that Genesis 1:1–2:4 exhibits text-linguistic characteristics such as the following: one, verb forms unique to narrative literature; two, a lack of future orientation in the text, which is a marker of narrative literature;

and three, *wayqtl* verbal forms that are typical of narrative literature, but not of poetic literature. To summarize, there are good reasons to conclude that the creation event is not poetic literature. On the contrary, it is historical narrative literature and it should be interpreted according to the plain meaning of the text.

Evidence of historical narrative literature continues in Genesis. As previously stated, Genesis 1 narrates the creation events. In addition, Genesis 2–3 narrates the beginnings of Adam, Eve, and their descendants. Genesis 6–9 narrates the account of Noah and the global Flood. Genesis 11–25 narrates the life of Abraham; and Genesis 26–50 narrates the lives of Isaac, Jacob, and his 12 sons. Within those sections is the overarching theme of Genesis 3:15—the seed of the woman. Who will be the obedient one promised in Genesis 3:15 that will one day crush the head of the seed of the Evil One? Genesis reveals in chapters 5 and 11 which family genealogy will carry the obedient seed line. And chapters 12–50 discuss which son of the patriarch will carry this seed line. The author of Genesis reveals early on that the obedient seed line originates with Adam, then to Seth, to Noah, to Shem, to Abraham, which is authenticated by the direct link of the genealogies of Genesis 5 and 11 (Ross 1997, 250), and then to Isaac, to Jacob, and ends with a promise to Judah’s family (Genesis 49:10). Thus, the narrative movement by the author of Genesis is not primarily interested in determining the age of the universe. This would appear to be secondary or even tertiary in importance. I would agree that the primary or even secondary focus of Genesis is not necessarily to determine the age of the universe; however, within the greater body of evangelicalism there is an erroneous teaching from those who espouse PDAC that the universe is billions of years old. This belief is not based upon the plain interpretation of Genesis as narrative literature; rather it is exclusively interpreted by the latest scientific theory that has its roots in the pre-Darwinian hypothesis that the earth is much older than 6,000 years. The literature is argued to be poetic literature, which allows PDAC to change the plain meaning of words to a new meaning that the author of Genesis never intended to communicate. To state in another way, the Bible is being reinterpreted, not by studying the text primarily, but rather through elevating the scientific method to a magisterial role, co-equal with Scripture, rather than a ministerial role. And when the scientific method is elevated, as such, above the plain and normal reading of Genesis 1–11, the interpretation leads believers to conclude that the universe is billions of years old.

Thus, when this happens, a shift occurs from biblical theology (studying the text primarily) to

apologetics (are there any textual clues in Genesis or in the Bible that could counter PDAC?). SDC believes that there are textual clues, and that the divine and human authors of Genesis and the Bible have left the reader those clues which will indicate that the approximate age of the universe can be determined. SDC also affirms that there are limits on the upper range of the age of the universe, which if exceeded would “do violence to the chronological framework of all subsequent Bible history and prophecy” (Whitcomb and Morris 1961, 485). Given this summary of SDC hermeneutics—has the author left the reader textual clues to determine the upper limits of the age of the universe? SDCs affirm that he has.

**SDC Interpretation towards the Age of the Universe and Earth**

SDCs affirm the magisterial role of the Bible and the ministerial role of scientific discoveries of nature. Nature is not the sixty-seventh book of the Bible, due to the affects of sin upon nature and upon the human mind. They maintain the genre of the creation account is historical narrative and to be interpreted with a plain-literal-historical-grammatical-canonical meaning. Meaning is found in the text of the passage and placed there by the author. The text that accurately describes the creation event is Genesis 1:1–2:4. SDCs reject the belief that there is a gap of billions of years between Genesis 1:1 and Genesis 1:2. Although the scope of this paper is not about the Gap Theory, the reader should know that SDCs reject the Gap Theory for many reasons that this space will not allow. However, so that the reader is equipped to provide an answer, I will provide one reason.<sup>24</sup> Grammatically, for there to be a gap between Genesis 1:1 and 1:2, the conjunction would have to be a consecutive *waw*. A *waw* is a Hebrew letter (ו) which is often placed at the beginning of a sentence (remember Hebrew language reads from right to left) and is used as a conjunction that can be translated as “and,” “but,” “now,” “then,” and several other words, depending upon the context and type of *waw* involved. A consecutive *waw* is a sequential conjunction that continues the narrative. For example, “Raul went to the store, then drove to the beach then surfed.” The words “then” are an example of a sequential conjunction. The narrative continues from the store to the beach to surfing. A problem for the Gap Theorists is that Genesis 1:2 does not begin with sequential conjunction, but with a disjunctive *waw*.

A disjunctive *waw* is an explanatory conjunction that breaks the narrative sequence. For example, “Raul went to the store and yet the store was

closed because it was holiday.” The word “yet” is an example of an explanatory conjunction. The narrative does not continue, rather the author stops the narrative to explain something, which in this case is that “the store was closed because it was a holiday.” Grammatically, Genesis 1:3 is the continuation from Genesis 1:1 of the historical narrative because it begins with a consecutive *waw* (sequential conjunction), while Genesis 1:2 is a break in the historical narrative because it begins with a disjunctive *waw* (explanatory conjunction). To put it another way, Genesis 1:1 begins the historical narrative. Genesis 1:2 stops the historical narrative to describe the form of the earth immediately after God created it. There is no time gap between Genesis 1:1 and Genesis 1:2, only an explanation. Genesis 1:3 then continues the historical narrative to describe what He did on the first day (Day 1). The diagram below describes how Genesis 1:1–3 should be read in English by a way of an analogy.

Raul went to the store. 2 <b>Yet</b> the store was closed because it was a holiday. 3 <b>Then</b> he went to the beach.	In the beginning God created the heavens and the earth. 2 <b>Yet</b> the earth was formless and void, . . . 3 God said, “Let there be light”; and there was light.
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After revealing that SDCs have a good reason to reject the Gap Theory, SDCs assert that the Genesis 1:3–Genesis 2:4 pericope describes each day of the creation event as a 24-hour day. There is internal evidence, such as specific temporal terms, found within the pericope that leads the reader to conclude that the creation account should be taken literally. For example, “evening and morning” together, appears at the end of each of the six days. “The references to ‘evening’ and ‘morning’ together, outside of Genesis 1, invariably, without exception in the Old Testament (fifty-seven times total—nineteen times with *yôm*, or ‘day’, and thirty-eight without *yôm*) indicate a literal solar day” (Davidson 2015, 78). In addition, the six creation days are connected with an ordinal or cardinal number (one, second, third . . .) and “a comparison with occurrences of the term elsewhere in the Scripture reveals that such usages always refer to literal days” (2015, 78). Walton, who embraces some form of evolutionary biology (2009, 163), agrees with SDC’s assessment of *yôm*. He opines, “it is extremely difficult to conclude that anything other than a twenty-four-hour day was intended. It is not the text that causes people to think otherwise, only the demands of trying to harmonize with modern science” (2001, 81). And he underscores eight years later, “[SDC] reading of the word ‘day’ (*yôm*) as a twenty-four-hour day is accurate” (Walton 2009, 105). To summarize the SDC view, they maintain, based

<sup>24</sup> For a thorough response in rejecting the Gap Theory, see Fields (2005) and Faulkner (2016).

upon the following: one, there is insufficient textual evidence to conclude the universe is billions of years old, two, the magisterial role of Scripture over nature, three, the genre of historical narrative in the creation account and the grammatical markers in Genesis 1:1–2:4, five, the lack of a gap between Genesis 1:1 and 1:2, six, the internal markers such as “evening and morning,” day one, second day, third day, etc. and seven, the fact that outside of Genesis, those markers connect to *yôm* and consistently render a meaning of a solar day.

### **Theological and Practical Implications: Differing Creation Account**

The SDCs interpret the days of creation in a narrative-historical-linear way. Genesis 1:1–2:4 describe each day of the week with the divine creative acts (light, atmosphere, land, vegetation, sun, birds, sea and land animals, humans, and a day of rest). The PDACs interpret the days of creation in a poetic-metaphorical-linear way, which, as described previously, diverges from the Genesis creation account and the evolutionary creation story (still with billions of years). I would suggest Ross has invented his own creation story. For Ross, Day 1 represents the first epoch in which God creates the earth, sun, moon, and stars billions of years ago. Day 2, the second epoch, has rain falling upon the earth, perhaps for a few billion years. Day 3, the third epoch, the emergence of land over a four-billion-year process and some primitive plant species. Day 4, the fourth epoch, the sun’s light on earth is visible from the perspective of an observer on earth. Day 5, the fifth epoch, is the creation of marine creatures, including sea dinosaurs. Day 6, the sixth epoch, is the creation of land animals, including land dinosaurs. Millions of years later, approximately 60,000 to 100,000 years ago (Ross 2014, 75) Adam and Eve were divinely created.<sup>25</sup> The Day 7 epoch is still lasting, culminating at the creation of the new heavens and earth in Revelation.

### **Theological and Practical Implications: Different Noah’s Flood Narrative**

The SDCs interpret the Flood event with the same hermeneutic—understanding that there was a worldwide flood whereby the entire planet was covered with water. The animals that survived were

some marine creatures and those land-dwelling, air-breathing animals that God brought to Ark. There were only eight humans that survived the deluge: Noah, his wife, his three sons, and his three daughters-in-law. The Flood lasted a little over one year, before those inside the Ark were free to repopulate the earth (Sarfati 2004, 216; Snelling 2009, 20).

The PDACs interpret the flood event as worldwide but not global. “Worldwide with respect to people and the animals associated with them, which is not to say global” (Ross 2017, 85). The flood was not global but covering “the settlements in Mesopotamia and the Persian Gulf Oasis” (Ross 2014, 149). There is a “lack of direct geological evidences” (2014, 156) for this flood because a flood of this limited size could not account for “all of Earth’s major geological features, [as this] flatly contradicts the physical evidence” (2014, 155). The flood during Noah’s lifetime was approximately 40,000 years ago (2014, 156–157).<sup>26</sup>

### **Theological and Practical Implications: Different Context for the Gospel**

The most serious difference is theological. The PDAC theory has death, bloodshed, and disease as part of God’s original creation. “The entire creation has been ‘groaning,’ right up to the present, as a consequence of its ‘bondage to decay’” (Ross 2017, 75) due to the second law of thermodynamics that God created on Day 1. The death of nonhuman life for billions of years “blessed humanity with a treasure chest of more than seventy-six quadrillion tons of biodeposits from which to build a global civilization and facilitate the fulfillment of the Great Commission in mere thousands, rather than millions, of years” (2017, 86–87). Human suffering, although tragic, was minimized through the billions and millions of years of death, decay, and disease of plant, animal, and hominid life (Ross 2014, 75–76). Only through this process could the gospel be facilitated to reach the maximum number of people to enter into the new heavens and earth that will be free of disease, bloodshed, and death.<sup>27</sup>

The SDCs assert that bloodshed, disease, and death were not part of the original creation that God saw as very good. Plant “death” is a red herring,<sup>28</sup> designed to divert believers into thinking that death was present before the Fall, when it was not. God created animals and humans as vegetarians thus,

<sup>25</sup> Determining the date Ross assigns to the creation of Adam and Eve is difficult to ascertain. In 1994, he declared Adam and Eve were created 10,000 to 35,000 years ago with outside limits of 6,000 to 60,000 years ago; (see Ross 1994, 140). But, in 2006, Ross proclaimed they were created approximately 50,000 years ago (see Ross 2006, 21). Yet, in 2014, Ross asserted that Adam and Eve were created 60,000 to 100,000 years ago (see Ross 2014, 75). Then, in 2017, he pronounced they were created between 12,000 to 135,000 years ago (see Ross 2017, 92).

<sup>26</sup> If Noah’s Flood was approximately 40,000 years ago, then Adam and Eve were created before that date. This means Ross’ view that Adam and Eve were created as early as 6,000 years ago, conflicts with the date of Noah’s Flood.

<sup>27</sup> I am assuming that the laws of thermodynamics will be not necessary in the new heaven and earth, sustained by another law or an understanding of thermodynamics that has yet been revealed because we live in a creation-cursed universe.

<sup>28</sup> Red herring fallacy introduces an irrelevant point into an argument. Someone may think (or may want us to think) it proves his side, but it really doesn’t.

the eating of plants is not death because plants are not alive, in the way the Bible defines life. On the other hand, the shedding of blood to cover Adam and Eve's sin was death. After the Fall, God cursed the ground and the serpent (Genesis 3:14–19).<sup>29</sup> Ham captures the theological difference between SDCs and PDACs succinctly, “Ross does not have an orthodox view of the Fall or Romans 8:19–23” (Ham 2017, 102). Believing in death before the Fall is not a salvation issue, but teaching that death began before the Fall does undermine the consistency of the gospel. If Adam's sin did not bring physical death into the world, then the solution to Adam's sin—the physical death of God's Son and His subsequent physical resurrection from the dead—is inexplicable.

The PDAC view also undercuts the trustworthiness of the Bible. “It sends a message to others that you can pick and choose which parts of the Bible to believe” (Ham 2017, 44) and makes human reason the final arbitrator in determining what the text meant, rather than letting the author (human and divine) determine the meaning. “The whole philosophy of the Atonement is undermined by teaching that there were millions of years of bloodshed before sin” (Sarfati 2004, 216). It is a poisonous example of biblical hermeneutics.

Probably the most disturbing theological reflection made by Ross regarding the age of the universe and the gospel is his view that SDC is analogous to the circumcision debate that the early church dealt with in Acts 15. “As circumcision distorted the gospel and hampered evangelism, so, too, does young-universe creationism” (Ross 1994, 162). Ross is equating SDC to a belief rejected by the apostles at the “Jerusalem Council” and reiterated by Paul when he demanded that the Galatians expunge their belief that circumcision was necessary to be right with God. Ross' analogy would seem to indicate that PDAC and SDC is not a healthy family debate but is instead a theological war where only one side can be orthodox.

## Summary

The division between PDAC and SDC is vast. The debate is about more than just interpreting scientific evidence. In fact, the most important part of the debate is about the presuppositions of each group and their biblical hermeneutics. The PDAC view affirms the equality of general and special revelation in theory, while in practice they elevate their understanding of general revelation above special revelation, which means prevailing scientific discovery will be preferred to the theological teachings of the Bible. They believe

Scripture is consistent with the prevailing view that the universe is billions of years old. The creation event did not happen over six twenty-four-hour periods of time, rather over billions of years. Genesis is not read consistently as historical narrative and is often influenced and then interpreted according to the consensus of the scientists whose worldview conflicts with the biblical worldview.

The SDC view affirms the supremacy of special revelation over general revelation, which means Scripture is viewed as authoritative when it comes to the origins of the universe, and interpretations of scientific discoveries will not contradict the Bible. Genesis is primarily read as historical narrative, and since God was present when the universe began and cannot lie, His explanation on its origins is final. SDCs affirm the universe was created over six twenty-four-hour days. This means there is disparity between PDAC and SDC views. The theological significance of each view does indeed affect the story of the gospel and the perception of the trustworthiness of the Bible.

## References

- Archer, Gleason. 2007. *A Survey of Old Testament Introduction*. Revised and expanded. Chicago, Illinois: Moody Press.
- Arp, William. E. 2000. “Authorial Intent.” *The Journal of Ministry and Theology* 4, no. 1 (Spring): 36–50.
- Bediako, Daniel. 2011. *Genesis 1:1–2:3: A Textlinguistic Analysis*. Saarbrücken, Germany: VDM Verlag Dr. Müller GmbH.
- Boyd, Steven. W. 2008. “The Genre of Genesis 1:1–2:3; What Means This Text?” In *Coming to Grips with Genesis: Biblical Authority and the Age of the Earth*, edited by T. Mortenson and T.H. Ury, 163–192. Green Forest, Arkansas: Master Books.
- Catchpoole, David, and Mark Harwood. 2014. “Ethics and Morality.” In *Evolution's Achilles' Heels*, edited by Robert Carter, 233–260. Powder Springs, Georgia: Creation Book Publishers.
- Chaffey, Tim, and Jason Lisle. 2008. *Old Earth Creationism on Trial: The verdict Is In*. Green Forest, Arkansas: Master Books.
- Chisholm, Robert., Jr. 1985. “Hosea.” In *The Bible Knowledge Commentary: An Exposition of the Scriptures*. Vol. 1, edited by John F. Walvoord and Roy B. Zuck. Wheaton, Illinois: Victor Books.
- Coppes, L. 1999. “852, ׀ׁ.” In *Theological Wordbook of the Old Testament*, edited by R. Laird Harris, Gleason L. Archer Jr., and Bruce Waltke. Chicago, Illinois: Moody Press.
- Craig, William Lane. 2008. *Reasonable Faith: Christian Truth and Apologetics*. Wheaton, Illinois: Crossway Books.
- Darwin, Charles. (1859) 2003. *The Origin of Species: By Means of Natural Selection or the Preservation of Favoured Races in the Struggle for Life*. New York: Signet Classics, New

<sup>29</sup> I believe it is also fair to state indirectly that the curse affected animals. My reasoning is because animals were originally created herbivores, but now many are carnivores. Carnivore action is contrary to God's original good creative order; thus, the curse has affected animals in some way that affects their instincts-behavior. I would also argue that κτίσις (creation) in Romans 8:19–22 subsumes animals and everything on earth.

- American Library.
- Davidson, Richard. 2015. "The Genesis Account of Origins" In *The Genesis Creation Account: And Its Reverberations in the Old Testament*, edited by G.A. Klingbeil, 59–130. Berrien Springs, Michigan: Andrews University Press.
- Davis, Jud. 2012. "24 Hours—Plain as Day." *Answers* 7, no. 2 (April 1): 67–69. <https://answersingenesis.org/days-of-creation/24-hours-plain-as-day/>.
- DeYoung, Don. 2005. *Thousands...Not Billions: Challenging the Icon of Evolution, Questioning the Age of the Earth*. Green Forest, Arkansas: Master Books.
- Faulkner, Danny. 2013. "A Proposal for a New Solution to the Light Travel Time Problem" *Answers Research Journal* 6 (July 24): 279–284. <https://answersingenesis.org/astronomy/starlight/a-proposal-for-a-new-solution-to-the-light-travel-time-problem/>.
- Faulkner, Danny. 2016. "Thoughts on the *rāqīa'* and a Possible Explanation for the Cosmic Microwave Background" *Answers Research Journal* 9 (March 23): 57–65. <https://answersingenesis.org/astronomy/cosmology/thoughts-raqia-and-possible-explanation-cosmic-microwave-background/>.
- Fields, Weston. 2005. *Unformed and Unfilled: A Critique of the Gap Theory*. Green Forest, Arkansas: Master Books.
- Frame, John M. 2015. *Apologetics: A Justification of Christian Belief*. Phillipsburg, New Jersey: P&R Publishing.
- Geisler, Norman. 2003. *Systematic Theology*. Vol. 2. Minneapolis, Minnesota: Bethany House.
- Geisler, Norman L. 2013. *Christian Apologetics*. Grand Rapids, Michigan: Baker Academic.
- Geisler, Norman L. 2014. "Does Believing in Inerrancy Require One to Believe in Young Earth Creationism?" (February 12). <http://doi-normangeisler.com/does-believing-in-inerrancy-require-one-to-believe-in-young-earth-creationism/>
- Griffith, Richard James. 1990. "The Eschatological Significance of the Sabbath." PhD diss., Dallas Theological Seminary.
- Groothuis, Douglas. 2011. *Christian Apologetics: A Comprehensive Case for Biblical Faith*. Downers Grove, Illinois: IVP Academic.
- Grudem, Wayne. 2000. *Systematic Theology: An Introduction to Biblical Doctrine*. Grand Rapids, Michigan: Zondervan.
- Ham, Ken. 2013. *Six Days: The Age of the Earth and the Decline of the Church*. Green Forest, Arkansas: Master Books.
- Ham, Ken. 2017 "Young-Earth Creationism." In *Four Views on Creation, Evolution, and Intelligent Design*, edited by J.B. Stump, 17–48. Grand Rapids, Michigan: Zondervan.
- Hindson, Ed, and Gary Yates. 2012. *The Essence of the Old Testament: A Survey*. Nashville, Tennessee: B&H Academic.
- Hirsch, E.D. Jr. 1967. *Validity in Interpretation*. New Haven, Connecticut: Yale University Press.
- Hodges, Zane. 1985. "Hebrews." In *The Bible Knowledge Commentary: An Exposition of the Scriptures*, Vol. 2, edited by John F. Walvoord and Roy B. Zuck. Wheaton, Illinois: Victor Books.
- Humphreys, D. Russell. 1994. *Starlight and Time: Solving the Puzzle of Distant Starlight in a Young Universe*. Green Forest, Arkansas: Master Books.
- Humphreys, D. Russell. 2008. "New Time Dilation Helps Creation Cosmology." *Journal of Creation* 22, no. 3 (December): 84–92. <https://creation.com/new-time-dilation-helps-creation-cosmology>.
- Johnson, Elliott E. 1990. *Expository Hermeneutics: An Introduction*. Grand Rapids, Michigan: Zondervan.
- Jordan, James B. 1999. *Creation in Six Days: A Defense of the Traditional Reading of Genesis One*. Moscow, Idaho: Canon Press.
- Koehler, Ludwig, Walter Baumgartner, and Johann Jakob Stamm. 1994–2000. *The Hebrew and Aramaic Lexicon of the Old Testament*. Leiden, Netherlands: E.J. Brill.
- Lange, John Peter. (1899) 2008. *A Commentary on the Holy Scriptures: Hosea*. Bellingham, Washington: Logos Bible Software.
- Lisle, Jason. 2010. "Anisotropic Synchrony Convention—A Solution to the Distant Starlight Problem." *Answers Research Journal* 3 (September 22): 191–207. <https://answersingenesis.org/astronomy/starlight/anisotropic-synchrony-convention-distant-starlight-problem/>.
- Lisle, Jason. 2012. *Taking Back Astronomy: The Heavens Declare Creation and Science Confirms It*. Green Forest, Arkansas: Master Books.
- Mayr, Ernst. 2001. *What Evolution Is*. New York: Basic Books.
- McCabe, Robert. V. 2008. "A Critique of the Framework Interpretation of the Creation Week." In *Coming to Grips with Genesis: Biblical Authority and the Age of the Earth*, edited by Terry Mortenson and Thane H. Ury, 211–249. Green Forest, Arkansas: Master Books.
- McGee, David. 2012. "Creation Date of Adam from the Perspective of Young-Earth Creationism." *Answers Research Journal* 5 (November 28): 217–230. <https://answersingenesis.org/bible-characters/adam-and-eve/creation-date-of-adam-from-young-earth-creationism-perspective/>.
- Mook, James. R. 2008. "The Church Fathers on Genesis, the Flood, and the Age of the Earth." In *Coming to Grips with Genesis: Biblical Authority and the Age of the Earth*, edited by Terry Mortenson and Thane H. Ury, 23–52. Green Forest, Arkansas: Master Books.
- Moreland, J.P., and John Mark Reynolds, eds. 1999. *Three Views on Creation and Evolution. Counterpoints*. Grand Rapids, Michigan: Zondervan.
- Morris, Henry. M. 1976. *The Genesis Record: A Scientific and Devotional Commentary on the Book of Beginnings*. Grand Rapids, Michigan: Baker Books.
- Mortenson, Terry and Thane. H. Ury. eds. 2008. *Coming to Grips with Genesis: Biblical Authority and the Age of the Earth*. Green Forest, Arkansas: Master Books.
- Newton, Robert. 2001. "Distant Starlight and Genesis: Conventions of Time Measurement." *TJ* 15 no.1 (April): 80–85. <https://creation.com/distant-starlight-and-genesis-conventions-of-time-measurement>.
- Osborne, Grant R. 1991. *The Hermeneutical Spiral: A Comprehensive Introduction to Biblical Interpretation*. Downers Grove, Illinois: IVP Academic.
- Purtill, Richard L. 1997. "Defining Miracles." In *In Defense of Miracles: A Comprehensive Case for God's Action in History*, edited by R. Douglas Geivett and Gary R. Habermas, 61–72. Downers Grove, Illinois: IVP Academic.
- Rana, Fazale, and Hugh Ross. 2004. *Origins of Life: Biblical and Evolutionary Models Face Off*. Colorado Springs, Colorado: NavPress.
- Ross, Allen P. 1997. *Creation and Blessing: A Guide to the Study and Exposition of Genesis*. Grand Rapids, Michigan:

- Baker Academic.
- Ross, Hugh. 1994. *Creation and Time: A Biblical and Scientific Perspective on the Creation-Date Controversy*. Colorado Springs, Colorado: NavPress.
- Ross, Hugh. 2006. *Genesis One: A Scientific Perspective*. 4th ed. Covina, California: Reasons to Believe.
- Ross, Hugh. 2014. *Navigating Genesis: A Scientist's Journey through Genesis 1–11*. Covina, California: RTB Press.
- Ross, Hugh. 2017. "Old-Earth (Progressive) Creationism." In *Four Views on Creation, Evolution, and Intelligent Design*, edited by J.B. Stump, 71–100. Grand Rapids, Michigan: Zondervan.
- Sailhamer, John H. 2009. *The Meaning of the Pentateuch: Revelation, Composition and Interpretation*. Downers Grove, Illinois: IVP Academic.
- Sarfati, John. 2004. *Refuting Compromise: A Biblical and Scientific Refutation of Progressive Creationism (Billions of Years) as Popularized by Astronomer Hugh Ross*. Green Forest, Arkansas: Master Books.
- Sexton, Jeremy. 2018. "Evangelicalism's Search for Chronological Gaps in Genesis 5 and 11: A Historical, Hermeneutical, and Linguistic Critique." *Journal of the Evangelical Society* 61, no. 1: 5–25.
- Snelling, Andrew. A. 2009. *Earth's Catastrophic Past: Geology, Creation, and the Flood*. Vol 1. Dallas, Texas: Institute for Creation Research.
- Sproul, R.C. 1996. *Explaining Inerrancy*. Orlando, Florida: Ligonier Ministries.
- Stallard, Michael. 2000. "Literal Interpretation: The Key to Understanding the Bible." *The Journal of Ministry and Theology* 4, no. 1 (Spring): 14–35.
- Swanson, James A. 1997. *Dictionary of Biblical Languages with Semantic Domains: Hebrew*. Oak Harbor, Washington: Logos Research Systems.
- Vardiman, Larry, and D. Russell. Humphreys. 2010. "A New Creationist Cosmology: In No Time at All Part 1." *Acts & Facts* 39, no. 11: 12–15. <https://www.icr.org/article/5686>.
- Vardiman, Larry, and D. Russell Humphreys. 2011a. "A New Creationist Cosmology: In No Time at All Part 2." *Acts & Facts* 40, no. 1: 12–14. <https://www.icr.org/article/5830/>.
- Vardiman, Larry, and D. Russell. Humphreys. 2011b. "A New Creationist Cosmology: In No Time at All Part 3." *Acts & Facts* 40, no. 2: 12–14. <https://www.icr.org/article/5870/>.
- Walton, John H. 2001. *Genesis. The NIV Application Commentary*. Grand Rapids, Michigan: Zondervan.
- Walton, John H.. 2009. *The Lost World of Genesis One: Ancient Cosmology and the Origins Debate*. Downers Grove, Illinois: IVP Academic.
- Whitcomb, John C., and Henry M. Morris. 1961. *The Genesis Flood: The Biblical Record and Its Scientific Implications*. Philadelphia, Pennsylvania: Presbyterian and Reformed Pub. Co.
- Whitcomb, John. 1973. "The Science of Historical Geology." *Westminster Theological Journal* 36, no. 1 (Fall): 65–77.
- Wolff, Hans Walter. 1974. *Hermeneia: Hosea: A Commentary on the Book of the Prophet Hosea*. Translated by Gary Stansell. Philadelphia, Pennsylvania: Fortress Press.

